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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,014	02/11/2004	James A. Laugharn JR.	CVRS-P04-001	2221
7590	03/25/2005		EXAMINER	
Patent Group Ropes & Gray LLP One International Place Boston, MA 02110			SOOHOO, TONY GLEN	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/777,014	LAUGHARN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Tony G. Soohoo	1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 September 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 47-138 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) \_\_\_\_\_ is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) 47-138 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 47-89, drawn to a reaction vessel treatment with acoustic energy, classified in class 422, subclass 127.
  - II. Claim 90, drawn to a conduit mixing device with acoustic energy source, classified in class 366, subclass 108.
  - III. Claim 91, drawn to a positionable acoustic energy source reactor device, classified in class 181 , subclass 143.
  - IV. Claim 93-136, drawn to a method of treating samples in a reaction vessel , classified in class 422, subclass 129.
  - V. Claim 137, drawn to a method of mixing a sample in a conduit, classified in class 366, subclass 108.
  - VI. Claim 138, drawn to a method of treating a sample by moving an acoustic field, classified in class 422 acoustic, subclass 300.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group II,V and each of Group I, III, IV, VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions the later

invention of I,III,IV,V,IV have a different effect which does not provide a mixing effect of the former invention of group III,V provides a mixing effect in a conduit.

3. Inventions Group III,VI and Group I,II,IV,V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have a different mode of operation whereby the former group III,IV provides an operation of moving the acoustic energy source in contrast to the operation of the later Group I,II,IV,V has a focused energy source.

4. Inventions IV and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case apparatus may be used to practice may be used to sonically clean a vessel wall or may be used to sonically scan, test, or heat of the contents without treating the sample per se.

5. Inventions V and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case apparatus may be used to practice may be used to sonically clean a conduit.

Art Unit: 1723

6. Inventions III and VI are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case apparatus may be used to practice may be used to sonically scan and test of the contents without treating the sample pre se.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

8. This application contains claims directed to the following patentably distinct species of the claimed invention:

The Genus is a device and method with has containing body for treating a sample with a source of acoustic energy of a frequency of about 100Khz and about 100 MHz to apply to the body including the patentable distinct features of:

Species are:

A: including a focal zone larger than a vessel

B: including a focal zone smaller than a vessel

C: including a control to control the fluid flow

D: including a control to control acoustic energy

E: including a control to control the frequency

F: including a feed back sensor controlling the subspecies of

F1:a state of treatment of the sample

F2:a flow of sample

F3:the acoustic source

F4:a sensor to sense acoustic emissions from the sample (testing)  
feedback controller.

F5:a sensor to sense acoustic reflections feedback controller

F6:a temperature feedback controller

F7:an optical feedback controller

F8: a spectral feedback controller with subspecies

F8a:spectral excitation

F8b:spectral absorption

F8c:spectral fluorescence

F8d:spectral emission

G: including plural acoustic fields

H: including a sample positioning system with subspecies of

H1: a stop movement system

H2: a dither positioning system

I: the use of a method upon an organic material

J: the use of a method upon an inorganic material

K: the use of a method upon a mineral

L: the use of a method upon a biological sample

M: the use of a method upon a sample suspended in fluid

N: the use of the method with a solvent

O: the use of the method to mix samples

P: the use of the method including a 1<sup>st</sup> molecule and 2<sup>nd</sup> molecule

Q: the use of the method upon an antibody

R: the use of the method upon a substrate and ligand.

S: the use of the method upon a receptor

T: the use of the method upon a 1<sup>st</sup> nucleic acid molecule and 2<sup>nd</sup> nucleic acid

U: the use of the method to fluidize the sample

V: the use of the method to heat the sample

W: the use of the method to disrupt the sample

X: the use of the method to increase permeability of the sample

Y: the use of the method to enhance reaction of the sample

Z: the use of the method to sterilize the sample

AA: the use of the method to disrupt extra-cellular membranes

AB: the use of the method to lessening a barrier function

AC: the use of the method to treat in an interval

AD: the use of the method to control the duty cycle of the energy source

AE: including a vessel transferring system

AF: including a conduit

AG: including a positioning system to move the sample

AH: including a positioning system to move the acoustic source

If applicant believes that each of the above species and subspecies are not independent and distinct inventions, Applicant is invited so clearly which of the Species and subspecies listed applicant considers to be groupable together. Such a grouping should also identify the genus of the species as envisioned by applicant's invention.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, and single subspecies (if applicable) for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 47 to the apparatus and claim appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record

showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

9. A telephone call was made to John Bianco on JAN 28, 2005 to request an oral election to the above restriction requirement, but did not result in an election being made. It was agreed to provide a written restriction due to the number of issues raised by the number of restricted groups and species..

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

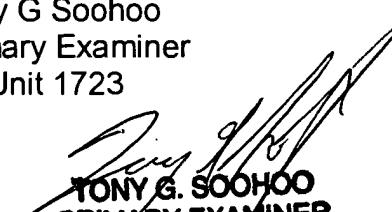
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 7:00 AM - 5:00 PM, Tues. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tony G Soohoo  
Primary Examiner  
Art Unit 1723

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**TONY G. SOOHO**  
**PRIMARY EXAMINER**